

Remarks/Arguments:

In response to the Restriction Requirement, Applicants confirm their provisional election to prosecute, in this application, claims drawn to the ball valve with a rotatable flange as recited in original claims 14-21. The elected claims are replaced by newly submitted claims 22-29.

Original claims 14-17 and 19 and 21 were rejected over the Rocheleau published patent application US 2002/0162986 under 35 USC § 102(e). Original claim 18 was rejected over the Rocheleau publication in view of Angel patent No. 4,549,576 under 35 USC § 103(a) and original claim 20 was rejected over the Rocheleau publication in view of the Langan Patent No. 5,819,780. These rejections are traversed.

A careful reading of the Rocheleau publication shows that it does not disclose a flange freely rotatable on the insert after the insert is assembled with the valve housing. In the Rocheleau publication, the position of the flange element 28 is adjusted relative to the valve body 10 during assembly. After assembly, the flange element 28 is clamped in place between the member 16 and the valve body 10. In contrast, in the valve assembly of this invention, the flange 106 is rotatable relative to the insert 102 and the valve body 100 after the assembly of these elements. Thus, the position of the flange 106 is adjustable during installation of the valve assembly in a fluid system.

The Rocheleau publication uses the terms "assembly" and "install" to mean different things at different times. A careful reading of the publication and a careful review of the drawing is required to understand Rocheleau's ball valve and its manner of use. In the Rocheleau publication the flange 28 is rotatable on element 16 to adjust the position of the flange relative to the valve body 10 when the flange 28 is being assembled with the valve body. When the adjustment is made, threaded element 16 is tightened in position on the valve body and clamps the flange 28 in its adjusted position. See paragraphs [006] and [0016] of the Rocheleau publication and Figure 6 of the drawing.

In paragraph [0006] at the right hand column, lines 5-7, Rocheleau states that "The flange element may be allowed to rotate relative to the valve body during assembly to allow the installer to select a preferred orientation." In the context of paragraph [0006] the use of the word "assembly" in the quoted sentence is directed to rotation of the flange when the element 16 is being assembled to the valve body 10. Note that the Rocheleau publication, in paragraph [0006] uses the term "install" (line 3) and this term is directed to the installation of the valve body to the circulator. Assembly and installation are two different procedures and it is clear

that the adjustment of the flange takes place when it is assembled to the valve body, not when the completed assembly is installed in a fluid system.

This understanding is confirmed in paragraph [0016], on page 2, at the left hand column, lines 12-22 of the Rocheleau publication. Starting at line 12, the Rocheleau publication explains how the flange element 28, ball 12, seals 20 and 22 and O-ring 18 are installed. Here the Rocheleau publication is actually explaining how to assemble this combination of elements. Unfortunately, the word installed is used, but in the context of paragraph [0016], installed clearly means the assembly of the flange element, ball, seals and o-ring. In line 18, the Rocheleau publication again discusses adjustment of the flange element 28 and the valve body 10, but the installation being discussed is actually in the context of assembling the flange element, ball, seals and o-ring as explained in lines 12-18.

Figure 6 of the Rocheleau publication clearly shows that the axially extending portion of the member 16 is relatively short. Compare that dimension to the axial thickness of the flange element 28 and it is clear that the flange element cannot slide on the member 16. Thus, when the member 16 is threaded into threads 17 on the valve body 10, the member 16 must clamp the flange element 28 against the valve body.

In contrast to the Rocheleau publication, claims 22-29 recite a valve assembly wherein the flange is freely rotatable after the insert, flange, ball and valve housing are assembled. Thus, the flange element is freely rotatable relative to the insert and the valve body as well as relative to a mating part in a fluid system. In this way the installation of the valve assembly into the fluid system is facilitated when the valve assembly is being installed in that system.

See claims 22-29 wherein the flange is recited as "being freely rotatable relative to the insert and the valve housing when the insert is assembled to the valve housing" and claims 27-29 wherein the flange is recited as "spaced from the valve housing and freely rotatable on the exterior or surface of the insert." Because the Rocheleau publication does not disclose these recitations, it does not anticipate claims 22-29 and cannot render them obvious to one skilled in the art.

Original claim 20 recited the polygonal interior section of the insert to accommodate a tightening tool. The rejection of that claim combined the Rocheleau publication and the Langan patent. New claims 23 and 29 recite the polygonal cross section and new claim 28 recites that the internal flow channel in the insert is formed to accommodate a tightening tool. The Langan patent discloses a tire device for controlled vehicle tire deflation. It has no disclosure or teaching relevant to a valve assembly used in a hot water system or a quarter turn valve assembly or an arrangement for facilitating installation of a valve in a heating system. There is

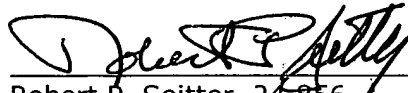
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no motivation to combine the disclosure of the Rocheleau publication and the Langan patent. A rejection under 35 USC 103(a) is thus improper.

In view of the foregoing, it is submitted that claims 22-29 are allowable.
Reconsideration and allowance of this application are requested.

Respectfully submitted,



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